

Appendix B
Basis of Construction Cost Estimates

Appendix B includes the following parts:

- Webb Tract, Rock Berm Option
- Bacon Island, Rock Berm Option
- Webb Tract, Bench Option
- Bacon Island, Bench Option
- Seepage Control System

URS Corporation
Engineer's Class 4 Design Construction Cost Estimate
WEBB TRACT IN-DELTA STORAGE ROCK BERM OPTION

WEBB TRACT IN-DELTA STORAGE ROCK BERM OPTION

Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

Prepared By: URS Corporation
Denver, Colorado

The Estimated Construction Cost is calculated with Microsoft Excel software and presented in the following categories and sheets. The categories are Detail, Direct Summary and Indirect Summary containing 5 sheets each. All data is entered on the 5 sheets in the Detail Category. The Direct and Indirect Summary communicate with the Detail category sheets. Each feature is subtotaled on the respective sheet in the Direct and Indirect Summary. A total is presented on sheet 5 of the Direct and Indirect Summary. The Direct Summary summarizes all data entered on the Detail sheets and computes Unit Prices. The Indirect Summary adds General Requirements, General and Administrative, Profit and Bond costs to the Direct Summary and computes "marked up" Unit Prices.

Cost Summary

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE ROCK BERM OPTION

GENERAL REQUIREMENTS				
Management	\$	2,918,708		
Administration		1,049,895		
Quality		1,224,878		
Facilities		524,948		
Mobilizaiton		657,934		
Engineering		1,116,388	7,492,751	7%
SITE PREPARATION				
Site Clearing: Clearing and Grubbing		482,112		
Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED				
Dewatering: Operate and Maintain Well Point System NOT USED				
Shoring and Underpinning: Barge Unloading Facility		4,223,494	4,705,606	4%
SITE CONSTRUCTION EMBANKMENT				
Excavation		17,103,956		
Embankment		43,256,257		
Erosion and Sediment Contol Filter Fabric		3,803,420		
Erosion and Sediment Contol Riprap		27,373,854		
Aggregate Surfacing		855,956	92,393,443	88%
Subtotal:	\$		104,591,800	100%

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San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE ROCK BERM OPTION
Effective Date: June, 2003

1 GENERAL REQUIREMENTS										
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>DIRECT</i>	<i>GEN REQ</i>	<i>G & A</i>	<i>PROFIT</i>	<i>BOND</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
01310.0	Management	60.0	MO	2,502,000		125,100	262,710	28,898	2,918,708	48,645.14
01320.0	Administration	60.0	MO	900,000		45,000	94,500	10,395	1,049,895	17,498.25
01430.0	Quality	60.0	MO	1,050,000		52,500	110,250	12,128	1,224,878	20,414.63
01520.0	Facilities	60.0	MO	450,000		22,500	47,250	5,198	524,948	8,749.13
01540.0	Mobilizaiton	50.0	EA	564,000		28,200	59,220	6,514	657,934	13,158.68
01720.0	Engineering	60.0	MO	957,000		47,850	100,485	11,053	1,116,388	18,606.47
GENERAL REQUIREMENTS		5,611,500.0	CY	6,423,000		321,150	674,415	74,186	7,492,751	1.34

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San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE ROCK BERM OPTION
Effective Date: June, 2003

2 SITE PREPARATION										
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>DIRECT</i>	<i>GEN REQ</i>	<i>G & A</i>	<i>PROFIT</i>	<i>BOND</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02230.0	Site Clearing: Clearing and Grubbing	280.0	AC	413,280		20,664	43,394	4,773	482,112	1,721.83
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO							
02240.0	Dewatering: Construct Well Point System NOT USED		EA							
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO							
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	3,620,500		181,025	380,153	41,817	4,223,494	64.98
	SITE PREPARATION	5,611,500.0	CY	4,033,780		201,689	423,547	46,590	4,705,606	0.84

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3 SITE CONSTRUCTION EMBANKMENT

SPEC.	DESCRIPTION	QUANTITY	UOM	DIRECT	GEN REQ	G & A	PROFIT	BOND	TOTAL COST	UNIT PRICE
02315.0	Excavation and Fill: Haul Roads NOT USED		LF							
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA							
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA							
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	7,200,000.0	CY	6,192,000		309,600	650,160	71,518	7,223,278	1.00
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	5,500,000.0	CY	8,470,000		423,500	889,350	97,829	9,880,679	1.80
02330.0	Embankment: Moisture Conditon Borrow	5,500,000.0	CY	2,585,000		129,250	271,425	29,857	3,015,532	0.55
02330.0	Embankment: Load, Haul, Place, Compact Borrow	4,600,000.0	CY	13,800,000		690,000	1,449,000	159,390	16,098,390	3.50
02330.0	Embankment : Unload, Haul, Place Rock Fill	405,000.0	CY	20,695,500		1,034,775	2,173,028	239,033	24,142,336	59.61
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT L		EA							
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NOT L		EA							
02370.0	Erosion and Sed. Control: Filter Fabric Levee	7,400,000.0	SF	1,406,000		70,300	147,630	16,239	1,640,169	0.22
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	9,760,000.0	SF	1,854,400		92,720	194,712	21,418	2,163,250	0.22
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bed	7,500.0	CY	315,750		15,788	33,154	3,647	368,338	49.11
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	15,000.0	CY	676,500		33,825	71,033	7,814	789,171	52.61
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bed	74,000.0	CY	2,782,400		139,120	292,152	32,137	3,245,809	43.86
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	185,000.0	CY	7,511,000		375,550	788,655	86,752	8,761,957	47.36
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	300,000.0	CY	12,180,000		609,000	1,278,900	140,679	14,208,579	47.36
02700.0	Aggregate Surfacing: Unload, Haul, Place, Compact Roc	25,000.0	CY	733,750		36,688	77,044	8,475	855,956	34.24
SITE CONSTRUCTION EMBANKMENT		5,611,500.0	CY	79,202,300		3,960,115	8,316,242	914,787	92,393,443	16.47
TOTAL DIRECT AND INDIRECT COST		5,611,500	CY	89,659,080		4,482,954	9,414,203	1,035,562	104,591,800	18.64

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San Joaquin River Delta Stockton, California
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1 GENERAL REQUIREMENTS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
01310.0	Management	60.0	MO	2,190,000	312,000			2,502,000	41,700.00
01320.0	Administration	60.0	MO	750,000	150,000			900,000	15,000.00
01430.0	Quality	60.0	MO	750,000	300,000			1,050,000	17,500.00
01520.0	Facilities	60.0	MO	90,000	330,000	30,000		450,000	7,500.00
01540.0	Mobilizaiton	50.0	EA	189,000	375,000			564,000	11,280.00
01720.0	Engineering	60.0	MO	912,000	30,000	15,000		957,000	15,950.00
GENERAL REQUIREMENTS		5,611,500.0	CY	4,881,000	1,497,000	45,000		6,423,000	1.14

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2 SITE PREPARATION									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02230.0	Site Clearing: Clearing and Grubbing	280.0	AC	91,280	322,000			413,280	1,476.00
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO						
02240.0	Dewatering: Construct Well Point System NOT USED		EA						
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO						
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	422,500	1,183,000	2,015,000		3,620,500	55.70
	SITE PREPARATION	5,611,500.0	CY	513,780	1,505,000	2,015,000		4,033,780	.72

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3 SITE CONSTRUCTION EMBANKMENT									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02315.0	Excavation and Fill: Haul Roads NOT USED		LF						
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA						
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA						
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	7,200,000.0	CY	2,376,000	3,816,000			6,192,000	.86
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	5,500,000.0	CY	2,200,000	6,270,000			8,470,000	1.54
02330.0	Embankment: Moisture Conditon Borrow	5,500,000.0	CY	1,155,000	1,430,000			2,585,000	.47
02330.0	Embankment: Load, Haul, Place, Compact Borrow	4,600,000.0	CY	4,370,000	9,430,000			13,800,000	3.00
02330.0	Embankment : Unload, Haul, Place Rock Fill	405,000.0	CY	2,389,500	5,346,000	12,960,000		20,695,500	51.10
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT USED		EA						
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NOT USED		EA						
02370.0	Erosion and Sed. Control: Filter Fabric Levee	7,400,000.0	SF	592,000	296,000	518,000		1,406,000	.19
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	9,760,000.0	SF	780,800	390,400	683,200		1,854,400	.19
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	7,500.0	CY	44,250	99,000	172,500		315,750	42.10
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	15,000.0	CY	88,500	198,000	390,000		676,500	45.10
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	74,000.0	CY	259,000	821,400	1,702,000		2,782,400	37.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	185,000.0	CY	647,500	2,053,500	4,810,000		7,511,000	40.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	300,000.0	CY	1,050,000	3,330,000	7,800,000		12,180,000	40.60
02700.0	Agggregate Surfacing: Unload, Haul, Place, Compact Road Base	25,000.0	CY	51,250	107,500	575,000		733,750	29.35
SITE CONSTRUCTION EMBANKMENT		5,611,500.0	CY	16,003,800	33,587,800	29,610,700		79,202,300	14.11

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1 GENERAL REQUIREMENTS									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
01310.0	Management	60.0	MO	36,500.00	5,200.00			41,700.00	
				2,190,000	312,000			2,502,000	41,700.00
01320.0	Administration	60.0	MO	12,500.00	2,500.00			15,000.00	
				750,000	150,000			900,000	15,000.00
01430.0	Quality	60.0	MO	12,500.00	5,000.00			17,500.00	
				750,000	300,000			1,050,000	17,500.00
01520.0	Facilities	60.0	MO	1,500.00	5,500.00	500.00		7,500.00	
				90,000	330,000	30,000		450,000	7,500.00
01540.0	Mobilizaiton	50.0	EA	3,780.00	7,500.00			11,280.00	
				189,000	375,000			564,000	11,280.00
01720.0	Engineering	60.0	MO	15,200.00	500.00	250.00		15,950.00	
				912,000	30,000	15,000		957,000	15,950.00
GENERAL REQUIREMENTS		5,611,500.0	CY	4,881,000	1,497,000	45,000		6,423,000	1.14

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2 SITE PREPARATION									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
02230.0	Site Clearing: Clearing and Grubbing	280.0	AC	326.00	1,150.00			1,476.00	
				91,280	322,000			413,280	1,476.00
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO					.00	
02240.0	Dewatering: Construct Well Point System NOT USED		EA					.00	
	3500 GPM Per Set								
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO					.00	
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	6.50	18.20	31.00		55.70	
				422,500	1,183,000	2,015,000		3,620,500	55.70
	SITE PREPARATION	5,611,500.0	CY	513,780	1,505,000	2,015,000		4,033,780	.72

URS Corporation
Engineer's Class 4 Design Construction Cost Estimate
BACON ISLAND IN-DELTA STORAGE ROCK BERM OPTION

BACON ISLAND IN-DELTA STORAGE ROCK BERM OPTION

Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

Prepared By: URS Corporation
Denver, Colorado

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Cost Summary

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San Joaquin River Delta Stockton, California
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GENERAL REQUIREMENTS				
Management	\$	2,918,708		
Administration		1,049,895		
Quality		1,224,878		
Facilities		524,948		
Mobilizaiton		657,934		
Engineering		1,116,388	7,492,751	7%
SITE PREPARATION				
Site Clearing: Clearing and Grubbing		361,584		
Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED				
Dewatering: Operate and Maintain Well Point System NOT USED				
Shoring and Underpinning: Barge Unloading Facility		4,223,494	4,585,078	4%
SITE CONSTRUCTION EMBANKMENT				
Excavation		31,321,868		
Embankment		30,442,289		
Erosion and Sediment Contol Filter Fabric		4,304,336		
Erosion and Sediment Contol Riprap		27,744,000		
Aggregate Surfacing		958,671	94,771,164	89%
Subtotal:	\$		106,848,992	100%

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1 GENERAL REQUIREMENTS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>DIRECT</i>	<i>GEN REQ</i>	<i>G & A</i>	<i>PROFIT</i>	<i>BOND</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
01310.0	Management	60.0	MO	2,502,000		125,100	262,710	28,898	2,918,708	48,645.14
01320.0	Administration	60.0	MO	900,000		45,000	94,500	10,395	1,049,895	17,498.25
01430.0	Quality	60.0	MO	1,050,000		52,500	110,250	12,128	1,224,878	20,414.63
01520.0	Facilities	60.0	MO	450,000		22,500	47,250	5,198	524,948	8,749.13
01540.0	Mobilizaiton	50.0	EA	564,000		28,200	59,220	6,514	657,934	13,158.68
01720.0	Engineering	60.0	MO	957,000		47,850	100,485	11,053	1,116,388	18,606.47
GENERAL REQUIREMENTS		5,957,500.0	CY	6,423,000		321,150	674,415	74,186	7,492,751	1.26

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Integrated Storage Investigations Programs

California Department of Water Resources

San Joaquin River Delta Stockton, California

BACON ISLAND IN-DELTA STORAGE ROCK BERM OPTION

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2 SITE PREPARATION

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>DIRECT</i>	<i>GEN REQ</i>	<i>G & A</i>	<i>PROFIT</i>	<i>BOND</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02230.0	Site Clearing: Clearing and Grubbing	210.0	AC	309,960		15,498	32,546	3,580	361,584	1,721.83
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT		MO							
02240.0	Dewatering: Construct Well Point System NOT USED		EA							
02240.0	Dewatering: Operate and Maintain Well Point System N		MO							
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	3,620,500		181,025	380,153	41,817	4,223,494	64.98
	SITE PREPARATION	5,957,500.0	CY	3,930,460		196,523	412,698	45,397	4,585,078	0.77

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3 SITE CONSTRUCTION EMBANKMENT

SPEC.	DESCRIPTION	QUANTITY	UOM	DIRECT	GEN REQ	G & A	PROFIT	BOND	TOTAL COST	UNIT PRICE
02315.0	Excavation and Fill: Haul Roads NOT USED		LF							
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA							
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA							
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	22,000,000.0	CY	18,920,000		946,000	1,986,600	218,526	22,071,126	1.00
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	6,100,000.0	CY	7,930,000		396,500	832,650	91,592	9,250,742	1.52
02330.0	Embankment: Moisture Condition Borrow	6,100,000.0	CY	2,867,000		143,350	301,035	33,114	3,344,499	0.55
02330.0	Embankment: Load, Haul, Place, Compact Borrow	5,100,000.0	CY	10,965,000		548,250	1,151,325	126,646	12,791,221	2.51
02370.0	Embankment : Unload, Haul, Place Rock Fill	240,000.0	CY	12,264,000		613,200	1,287,720	141,649	14,306,569	59.61
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT		EA							
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NO		EA							
02370.0	Erosion and Sed. Control: Filter Fabric Levee	8,600,000.0	SF	1,634,000		81,700	171,570	18,873	1,906,143	0.22
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	10,820,000.0	SF	2,055,800		102,790	215,859	23,744	2,398,193	0.22
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap B	8,500.0	CY	357,850		17,893	37,574	4,133	417,450	49.11
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	17,000.0	CY	766,700		38,335	80,504	8,855	894,394	52.61
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap B	80,000.0	CY	3,008,000		150,400	315,840	34,742	3,508,982	43.86
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	200,000.0	CY	8,120,000		406,000	852,600	93,786	9,472,386	47.36
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	284,000.0	CY	11,530,400		576,520	1,210,692	133,176	13,450,788	47.36
02700.0	Agggregate Surfacing: Unload, Haul, Place, Compact R	28,000.0	CY	821,800		41,090	86,289	9,492	958,671	34.24
SITE CONSTRUCTION EMBANKMENT		5,957,500.0	CY	81,240,550		4,062,028	8,530,258	938,328	94,771,164	15.91
TOTAL DIRECT AND INDIRECT COST		5,957,500	CY	91,594,010		4,579,701	9,617,371	1,057,911	106,848,992	17.94

Engineer's Class 4 Design Construction Cost Estimate

Integrated Storage Investigations Programs

California Department of Water Resources

San Joaquin River Delta Stockton, California

BACON ISLAND IN-DELTA STORAGE ROCK BERM OPTION

Effective Date: June, 2003

1 GENERAL REQUIREMENTS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
01310.0	Management	60.0	MO	2,190,000	312,000			2,502,000	41,700.00
01320.0	Administration	60.0	MO	750,000	150,000			900,000	15,000.00
01430.0	Quality	60.0	MO	750,000	300,000			1,050,000	17,500.00
01520.0	Facilities	60.0	MO	90,000	330,000	30,000		450,000	7,500.00
01540.0	Mobilizaiton	50.0	EA	189,000	375,000			564,000	11,280.00
01720.0	Engineering	60.0	MO	912,000	30,000	15,000		957,000	15,950.00
GENERAL REQUIREMENTS		5,957,500.0	CY	4,881,000	1,497,000	45,000		6,423,000	1.08

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE ROCK BERM OPTION
Effective Date: June, 2003

2 SITE PREPARATION									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02230.0	Site Clearing: Clearing and Grubbing	210.0	AC	68,460	241,500			309,960	1,476.00
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO						
02240.0	Dewatering: Construct Well Point System NOT USED		EA						
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO						
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	422,500	1,183,000	2,015,000		3,620,500	55.70
	SITE PREPARATION	5,957,500.0	CY	490,960	1,424,500	2,015,000		3,930,460	.66

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE ROCK BERM OPTION
Effective Date: June, 2003

3 SITE CONSTRUCTION EMBANKMENT									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02315.0	Excavation and Fill: Haul Roads NOT USED		LF						
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA						
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA						
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	22,000,000.0	CY	7,260,000	11,660,000			18,920,000	.86
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	6,100,000.0	CY	1,830,000	6,100,000			7,930,000	1.30
02330.0	Embankment: Moisture Condition Borrow	6,100,000.0	CY	1,281,000	1,586,000			2,867,000	.47
02330.0	Embankment: Load, Haul, Place, Compact Borrow	5,100,000.0	CY	3,060,000	7,905,000			10,965,000	2.15
02370.0	Embankment : Unload, Haul, Place Rock Fill	240,000.0	CY	1,416,000	3,168,000	7,680,000		12,264,000	51.10
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT USED		EA						
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NOT USED		EA						
02370.0	Erosion and Sed. Control: Filter Fabric Levee	8,600,000.0	SF	688,000	344,000	602,000		1,634,000	.19
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	10,820,000.0	SF	865,600	432,800	757,400		2,055,800	.19
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	8,500.0	CY	50,150	112,200	195,500		357,850	42.10
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	17,000.0	CY	100,300	224,400	442,000		766,700	45.10
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	80,000.0	CY	280,000	888,000	1,840,000		3,008,000	37.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	200,000.0	CY	700,000	2,220,000	5,200,000		8,120,000	40.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	284,000.0	CY	994,000	3,152,400	7,384,000		11,530,400	40.60
02700.0	Aggregate Surfacing: Unload, Haul, Place, Compact Road Base	28,000.0	CY	57,400	120,400	644,000		821,800	29.35
	SITE CONSTRUCTION EMBANKMENT	5,957,500.0	CY	18,582,450	37,913,200	24,744,900		81,240,550	13.64

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE ROCK BERM OPTION
Effective Date: June, 2003

1 GENERAL REQUIREMENTS									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
01310.0	Management	60.0	MO	36,500.00	5,200.00			41,700.00	
				2,190,000	312,000			2,502,000	41,700.00
01320.0	Administration	60.0	MO	12,500.00	2,500.00			15,000.00	
				750,000	150,000			900,000	15,000.00
01430.0	Quality	60.0	MO	12,500.00	5,000.00			17,500.00	
				750,000	300,000			1,050,000	17,500.00
01520.0	Facilities	60.0	MO	1,500.00	5,500.00	500.00		7,500.00	
				90,000	330,000	30,000		450,000	7,500.00
01540.0	Mobilizaiton	50.0	EA	3,780.00	7,500.00			11,280.00	
				189,000	375,000			564,000	11,280.00
01720.0	Engineering	60.0	MO	15,200.00	500.00	250.00		15,950.00	
				912,000	30,000	15,000		957,000	15,950.00
GENERAL REQUIREMENTS		5,957,500.0	CY	4,881,000	1,497,000	45,000		6,423,000	1.08

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE ROCK BERM OPTION
Effective Date: June, 2003

2 SITE PREPARATION									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
02230.0	Site Clearing: Clearing and Grubbing	210.0	AC	326.00	1,150.00			1,476.00	
				68,460	241,500			309,960	1,476.00
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO					.00	
02240.0	Dewatering: Construct Well Point System NOT USED		EA					.00	
	3500 GPM Per Set								
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO					.00	
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	6.50	18.20	31.00		55.70	
				422,500	1,183,000	2,015,000		3,620,500	55.70
	SITE PREPARATION	5,957,500.0	CY	490,960	1,424,500	2,015,000		3,930,460	.66

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URS Corporation
Engineer's Class 4 Design Construction Cost Estimate
WEBB TRACT IN-DELTA STORAGE BENCH OPTION

WEBB TRACT IN-DELTA STORAGE BENCH OPTION

Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

Prepared By: URS Corporation
Denver, Colorado

The Estimated Construction Cost is calculated with Microsoft Excel software and presented in the following categories and sheets. The categories are Detail, Direct Summary and Indirect Summary containing 5 sheets each. All data is entered on the 5 sheets in the Detail Category. The Direct and Indirect Summary communicate with the Detail category sheets. Each feature is subtotaled on the respective sheet in the Direct and Indirect Summary. A total is presented on sheet 5 of the Direct and Indirect Summary. The Direct Summary summarizes all data entered on the Detail sheets and computes Unit Prices. The Indirect Summary adds General Requirements, General and Administrative, Profit and Bond costs to the Direct Summary and computes "marked up" Unit Prices.

Cost Summary

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE BENCH OPTION

GENERAL REQUIREMENTS				
Management	\$	2,918,708		
Administration		1,049,895		
Quality		1,224,878		
Facilities		524,948		
Mobilizaiton		657,934		
Engineering		1,116,388	7,492,751	6%
SITE PREPARATION				
Site Clearing: Clearing and Grubbing		482,112		
Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED				
Dewatering: Operate and Maintain Well Point System NOT USED				
Shoring and Underpinning: Barge Unloading Facility		4,223,494	4,705,606	4%
SITE CONSTRUCTION EMBANKMENT				
Excavation		39,156,417		
Embankment		41,575,842		
Erosion and Sediment Contol Filter Fabric		3,803,420		
Erosion and Sediment Contol Riprap		34,704,746		
Aggregate Surfacing		855,956	120,096,381	91%
Subtotal:	\$		132,294,738	100%

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Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

WEBB TRACT IN-DELTA STORAGE BENCH OPTION

Effective Date: June, 2003

1 GENERAL REQUIREMENTS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>DIRECT</i>	<i>GEN REQ</i>	<i>G & A</i>	<i>PROFIT</i>	<i>BOND</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
01310.0	Management	60.0	MO	2,502,000		125,100	262,710	28,898	2,918,708	48,645.14
01320.0	Administration	60.0	MO	900,000		45,000	94,500	10,395	1,049,895	17,498.25
01430.0	Quality	60.0	MO	1,050,000		52,500	110,250	12,128	1,224,878	20,414.63
01520.0	Facilities	60.0	MO	450,000		22,500	47,250	5,198	524,948	8,749.13
01540.0	Mobilizaiton	50.0	EA	564,000		28,200	59,220	6,514	657,934	13,158.68
01720.0	Engineering	60.0	MO	957,000		47,850	100,485	11,053	1,116,388	18,606.47
GENERAL REQUIREMENTS		10,749,000.0	CY	6,423,000		321,150	674,415	74,186	7,492,751	0.70

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

WEBB TRACT IN-DELTA STORAGE BENCH OPTION

Effective Date: June, 2003

2 SITE PREPARATION

SPEC.	DESCRIPTION	QUANTITY	UOM	DIRECT	GEN REQ	G & A	PROFIT	BOND	TOTAL COST	UNIT PRICE
02230.0	Site Clearing: Clearing and Grubbing	280.0	AC	413,280		20,664	43,394	4,773	482,112	1,721.83
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO							
02240.0	Dewatering: Construct Well Point System NOT USED		EA							
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO							
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	3,620,500		181,025	380,153	41,817	4,223,494	64.98
	SITE PREPARATION	10,749,000.0	CY	4,033,780		201,689	423,547	46,590	4,705,606	0.44

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

WEBB TRACT IN-DELTA STORAGE BENCH OPTION

Effective Date: June, 2003

3 SITE CONSTRUCTION EMBANKMENT

SPEC.	DESCRIPTION	QUANTITY	UOM	DIRECT	GEN REQ	G & A	PROFIT	BOND	TOTAL COST	UNIT PRICE
02315.0	Excavation and Fill: Haul Roads NOT USED		LF							
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA							
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA							
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	15,600,000.0	CY	13,416,000		670,800	1,408,680	154,955	15,650,435	1.00
02315.0	Excavation: Exc., Load, Haul, Waste Bench	500,000.0	CY	1,670,000		83,500	175,350	19,289	1,948,139	3.90
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	12,000,000.0	CY	18,480,000		924,000	1,940,400	213,444	21,557,844	1.80
02330.0	Embankment: Moisture Condition Borrow	12,000,000.0	CY	5,640,000		282,000	592,200	65,142	6,579,342	0.55
02330.0	Embankment: Load, Haul, Place, Compact Borrow	10,000,000.0	CY	30,000,000		1,500,000	3,150,000	346,500	34,996,500	3.50
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT U		EA							
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NOT L		EA							
02370.0	Erosion and Sed. Control: Filter Fabric Levee	7,400,000.0	SF	1,406,000		70,300	147,630	16,239	1,640,169	0.22
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	9,760,000.0	SF	1,854,400		92,720	194,712	21,418	2,163,250	0.22
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bed	55,000.0	CY	2,315,500		115,775	243,128	26,744	2,701,147	49.11
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	110,000.0	CY	4,961,000		248,050	520,905	57,300	5,787,255	52.61
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bed	74,000.0	CY	2,782,400		139,120	292,152	32,137	3,245,809	43.86
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	185,000.0	CY	7,511,000		375,550	788,655	86,752	8,761,957	47.36
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	300,000.0	CY	12,180,000		609,000	1,278,900	140,679	14,208,579	47.36
02700.0	Aggregate Surfacing: Unload, Haul, Place, Compact Ros	25,000.0	CY	733,750		36,688	77,044	8,475	855,956	34.24
SITE CONSTRUCTION EMBANKMENT		10,749,000.0	CY	102,950,050		5,147,503	10,809,755	1,189,073	120,096,381	11.17
TOTAL DIRECT AND INDIRECT COST		10,749,000	CY	113,406,830		5,670,342	11,907,717	1,309,849	132,294,738	12.31

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

WEBB TRACT IN-DELTA STORAGE BENCH OPTION

Effective Date: June, 2003

1 GENERAL REQUIREMENTS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
01310.0	Management	60.0	MO	2,190,000	312,000			2,502,000	41,700.00
01320.0	Administration	60.0	MO	750,000	150,000			900,000	15,000.00
01430.0	Quality	60.0	MO	750,000	300,000			1,050,000	17,500.00
01520.0	Facilities	60.0	MO	90,000	330,000	30,000		450,000	7,500.00
01540.0	Mobilizaiton	50.0	EA	189,000	375,000			564,000	11,280.00
01720.0	Engineering	60.0	MO	912,000	30,000	15,000		957,000	15,950.00
GENERAL REQUIREMENTS		10,749,000.0	CY	4,881,000	1,497,000	45,000		6,423,000	.60

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE BENCH OPTION
Effective Date: June, 2003

2 SITE PREPARATION									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02230.0	Site Clearing: Clearing and Grubbing	280.0	AC	91,280	322,000			413,280	1,476.00
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO						
02240.0	Dewatering: Construct Well Point System NOT USED		EA						
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO						
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	422,500	1,183,000	2,015,000		3,620,500	55.70
	SITE PREPARATION	10,749,000.0	CY	513,780	1,505,000	2,015,000		4,033,780	.38

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE BENCH OPTION
Effective Date: June, 2003

3 SITE CONSTRUCTION EMBANKMENT

SPEC.	DESCRIPTION	QUANTITY	UOM	LABOR	EQUIPMENT	MATERIAL	OTHER	TOTAL COST	UNIT PRICE
02315.0	Excavation and Fill: Haul Roads NOT USED		LF						
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA						
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA						
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	15,600,000.0	CY	5,148,000	8,268,000			13,416,000	.86
02315.0	Excavation: Exc., Load, Haul, Waste Bench	500,000.0	CY	520,000	1,150,000			1,670,000	3.34
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	12,000,000.0	CY	4,800,000	13,680,000			18,480,000	1.54
02330.0	Embankment: Moisture Condition Borrow	12,000,000.0	CY	2,520,000	3,120,000			5,640,000	.47
02330.0	Embankment: Load, Haul, Place, Compact Borrow	10,000,000.0	CY	9,500,000	20,500,000			30,000,000	3.00
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT USED		EA						
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NOT USED		EA						
02370.0	Erosion and Sed. Control: Filter Fabric Levee	7,400,000.0	SF	592,000	296,000	518,000		1,406,000	.19
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	9,760,000.0	SF	780,800	390,400	683,200		1,854,400	.19
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	55,000.0	CY	324,500	726,000	1,265,000		2,315,500	42.10
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	110,000.0	CY	649,000	1,452,000	2,860,000		4,961,000	45.10
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	74,000.0	CY	259,000	821,400	1,702,000		2,782,400	37.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	185,000.0	CY	647,500	2,053,500	4,810,000		7,511,000	40.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	300,000.0	CY	1,050,000	3,330,000	7,800,000		12,180,000	40.60
02700.0	Aggregate Surfacing: Unload, Haul, Place, Compact Road Base	25,000.0	CY	51,250	107,500	575,000		733,750	29.35
SITE CONSTRUCTION EMBANKMENT		10,749,000.0	CY	26,842,050	55,894,800	20,213,200		102,950,050	9.58

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE BENCH OPTION
Effective Date: June, 2003

1 GENERAL REQUIREMENTS									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
01310.0	Management	60.0	MO	36,500.00	5,200.00			41,700.00	
				2,190,000	312,000			2,502,000	41,700.00
01320.0	Administration	60.0	MO	12,500.00	2,500.00			15,000.00	
				750,000	150,000			900,000	15,000.00
01430.0	Quality	60.0	MO	12,500.00	5,000.00			17,500.00	
				750,000	300,000			1,050,000	17,500.00
01520.0	Facilities	60.0	MO	1,500.00	5,500.00	500.00		7,500.00	
				90,000	330,000	30,000		450,000	7,500.00
01540.0	Mobilizaiton	50.0	EA	3,780.00	7,500.00			11,280.00	
				189,000	375,000			564,000	11,280.00
01720.0	Engineering	60.0	MO	15,200.00	500.00	250.00		15,950.00	
				912,000	30,000	15,000		957,000	15,950.00
GENERAL REQUIREMENTS		10,749,000.0	CY	4,881,000	1,497,000	45,000		6,423,000	.60

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE BENCH OPTION
Effective Date: June, 2003

2 SITE PREPARATION										
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>	
02230.0	Site Clearing: Clearing and Grubbing	280.0	AC	326.00	1,150.00			1,476.00		
				91,280	322,000			413,280	1,476.00	
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO					.00		
02240.0	Dewatering: Construct Well Point System NOT USED		EA					.00		
	3500 GPM Per Set									
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO					.00		
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	6.50	18.20	31.00		55.70		
				422,500	1,183,000	2,015,000		3,620,500	55.70	
	SITE PREPARATION	10,749,000.0	CY	513,780	1,505,000	2,015,000		4,033,780	.38	

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San Joaquin River Delta Stockton, California
WEBB TRACT IN-DELTA STORAGE BENCH OPTION
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3 SITE CONSTRUCTION EMBANKMENT										
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>	
02315.0	Excavation and Fill: Haul Roads NOT USED		LF					.00		
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA					.00		
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA					.00		
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	15,600,000.0	CY	.33	.53			.86		
				5,148,000	8,268,000			13,416,000		
02315.0	Excavation: Exc., Load, Haul, Waste Bench	500,000.0	CY	1.04	2.30			3.34		
				520,000	1,150,000			1,670,000		
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	12,000,000.0	CY	.40	1.14			1.54		
	Assume Yield 70%			4,800,000	13,680,000			18,480,000		
02330.0	Embankment: Moisture Condition Borrow	12,000,000.0	CY	.21	.26			.47		
				2,520,000	3,120,000			5,640,000		
02330.0	Embankment: Load, Haul, Place, Compact Borrow	10,000,000.0	CY	.95	2.05			3.00		
	7,500 LF Haul			9,500,000	20,500,000			30,000,000		
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT USED		EA					.00		
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NOT USED		EA					.00		
02370.0	Erosion and Sed. Control: Filter Fabric Levee	7,400,000.0	SF	.08	.04	.07		.19		
				592,000	296,000	518,000		1,406,000		
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	9,760,000.0	SF	.08	.04	.07		.19		
				780,800	390,400	683,200		1,854,400		
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	55,000.0	CY	5.90	13.20	23.00		42.10		
	Slough			324,500	726,000	1,265,000		2,315,500		
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	110,000.0	CY	5.90	13.20	26.00		45.10		
	Slough			649,000	1,452,000	2,860,000		4,961,000		
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	74,000.0	CY	3.50	11.10	23.00		37.60		
	Reservoir			259,000	821,400	1,702,000		2,782,400		
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	185,000.0	CY	3.50	11.10	26.00		40.60		
	Reservoir			647,500	2,053,500	4,810,000		7,511,000		
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	300,000.0	CY	3.50	11.10	26.00		40.60		
	Reservoir 10:1 Slope			1,050,000	3,330,000	7,800,000		12,180,000		
02700.0	Agggregate Surfacing: Unload, Haul, Place, Compact Road Base	25,000.0	CY	2.05	4.30	23.00		29.35		
				51,250	107,500	575,000		733,750		
SITE CONSTRUCTION EMBANKMENT		10,749,000.0	CY	26,842,050	55,894,800	20,213,200		102,950,050		

URS Corporation
Engineer's Class 4 Design Construction Cost Estimate
BACON ISLAND IN-DELTA STORAGE BENCH OPTION

BACON ISLAND IN-DELTA STORAGE BENCH OPTION

Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

Prepared By: URS Corporation
Denver, Colorado

The Estimated Construction Cost is calculated with Microsoft Excel software and presented in the following categories and sheets. The categories are Detail, Direct Summary and Indirect Summary containing 5 sheets each. All data is entered on the 5 sheets in the Detail Category. The Direct and Indirect Summary communicate with the Detail category sheets. Each feature is subtotaled on the respective sheet in the Direct and Indirect Summary. A total is presented on sheet 5 of the Direct and Indirect Summary. The Direct Summary summarizes all data entered on the Detail sheets and computes Unit Prices. The Indirect Summary adds General Requirements, General and Administrative, Profit and Bond costs to the Direct Summary and computes "marked up" Unit Prices.

Cost Summary

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE BENCH OPTION

GENERAL REQUIREMENTS				
Management	\$	2,918,708		
Administration		1,049,895		
Quality		1,224,878		
Facilities		524,948		
Mobilizaiton		657,934		
Engineering		1,116,388	7,492,751	5%
SITE PREPARATION				
Site Clearing: Clearing and Grubbing		533,767		
Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED				
Dewatering: Operate and Maintain Well Point System NOT USED				
Shoring and Underpinning: Barge Unloading Facility		4,223,494	4,757,261	3%
SITE CONSTRUCTION EMBANKMENT				
Excavation		63,961,003		
Embankment		31,965,803		
Erosion and Sediment Contol Filter Fabric		4,304,336		
Erosion and Sediment Contol Riprap		36,463,903		
Aggregate Surfacing		958,671	137,653,717	92%
Subtotal:	\$		149,903,728	100%

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Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE BENCH OPTION
Effective Date: June, 2003

1 GENERAL REQUIREMENTS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>DIRECT</i>	<i>GEN REQ</i>	<i>G & A</i>	<i>PROFIT</i>	<i>BOND</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
01310.0	Management	60.0	MO	2,502,000		125,100	262,710	28,898	2,918,708	48,645.14
01320.0	Administration	60.0	MO	900,000		45,000	94,500	10,395	1,049,895	17,498.25
01430.0	Quality	60.0	MO	1,050,000		52,500	110,250	12,128	1,224,878	20,414.63
01520.0	Facilities	60.0	MO	450,000		22,500	47,250	5,198	524,948	8,749.13
01540.0	Mobilizaiton	50.0	EA	564,000		28,200	59,220	6,514	657,934	13,158.68
01720.0	Engineering	60.0	MO	957,000		47,850	100,485	11,053	1,116,388	18,606.47
GENERAL REQUIREMENTS		10,887,000.0	CY	6,423,000		321,150	674,415	74,186	7,492,751	0.69

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Integrated Storage Investigations Programs
California Department of Water Resources
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BACON ISLAND IN-DELTA STORAGE BENCH OPTION
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2 SITE PREPARATION

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>DIRECT</i>	<i>GEN REQ</i>	<i>G & A</i>	<i>PROFIT</i>	<i>BOND</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02230.0	Site Clearing: Clearing and Grubbing	310.0	AC	457,560		22,878	48,044	5,285	533,767	1,721.83
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT		MO							
02240.0	Dewatering: Construct Well Point System NOT USED		EA							
02240.0	Dewatering: Operate and Maintain Well Point System N		MO							
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	3,620,500		181,025	380,153	41,817	4,223,494	64.98
	SITE PREPARATION	10,887,000.0	CY	4,078,060		203,903	428,196	47,102	4,757,261	0.44

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE BENCH OPTION
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3 SITE CONSTRUCTION EMBANKMENT

SPEC.	DESCRIPTION	QUANTITY	UOM	DIRECT	GEN REQ	G & A	PROFIT	BOND	TOTAL COST	UNIT PRICE
02315.0	Excavation and Fill: Haul Roads NOT USED		LF							
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA							
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA							
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	43,600,000.0	CY	37,496,000		1,874,800	3,937,080	433,079	43,740,959	1.00
02315.0	Excavation: Exc., Load, Haul, Waste Bench	480,000.0	CY	1,603,200		80,160	168,336	18,517	1,870,213	3.90
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	12,100,000.0	CY	15,730,000		786,500	1,651,650	181,682	18,349,832	1.52
02330.0	Embankment: Moisture Conditon Borrow	12,100,000.0	CY	5,687,000		284,350	597,135	65,685	6,634,170	0.55
02330.0	Embankment: Load, Haul, Place, Compact Borrow	10,100,000.0	CY	21,715,000		1,085,750	2,280,075	250,808	25,331,633	2.51
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT		EA							
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NO		EA							
02370.0	Erosion and Sed. Control: Filter Fabric Levee	8,600,000.0	SF	1,634,000		81,700	171,570	18,873	1,906,143	0.22
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	10,820,000.0	SF	2,055,800		102,790	215,859	23,744	2,398,193	0.22
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap B	65,000.0	CY	2,736,500		136,825	287,333	31,607	3,192,264	49.11
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	130,000.0	CY	5,863,000		293,150	615,615	67,718	6,839,483	52.61
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap B	80,000.0	CY	3,008,000		150,400	315,840	34,742	3,508,982	43.86
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	200,000.0	CY	8,120,000		406,000	852,600	93,786	9,472,386	47.36
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	284,000.0	CY	11,530,400		576,520	1,210,692	133,176	13,450,788	47.36
02700.0	Agggregate Surfacing: Unload, Haul, Place, Compact R	28,000.0	CY	821,800		41,090	86,289	9,492	958,671	34.24
SITE CONSTRUCTION EMBANKMENT		10,887,000.0	CY	118,000,700		5,900,035	12,390,074	1,362,908	137,653,717	12.64
TOTAL DIRECT AND INDIRECT COST		10,887,000	CY	128,501,760		6,425,088	13,492,685	1,484,195	149,903,728	13.77

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE BENCH OPTION
Effective Date: June, 2003

1 GENERAL REQUIREMENTS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
01310.0	Management	60.0	MO	2,190,000	312,000			2,502,000	41,700.00
01320.0	Administration	60.0	MO	750,000	150,000			900,000	15,000.00
01430.0	Quality	60.0	MO	750,000	300,000			1,050,000	17,500.00
01520.0	Facilities	60.0	MO	90,000	330,000	30,000		450,000	7,500.00
01540.0	Mobilizaiton	50.0	EA	189,000	375,000			564,000	11,280.00
01720.0	Engineering	60.0	MO	912,000	30,000	15,000		957,000	15,950.00
GENERAL REQUIREMENTS		10,887,000.0	CY	4,881,000	1,497,000	45,000		6,423,000	.59

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE BENCH OPTION
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2 SITE PREPARATION									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02230.0	Site Clearing: Clearing and Grubbing	310.0	AC	101,060	356,500			457,560	1,476.00
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO						
02240.0	Dewatering: Construct Well Point System NOT USED		EA						
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO						
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	422,500	1,183,000	2,015,000		3,620,500	55.70
	SITE PREPARATION	10,887,000.0	CY	523,560	1,539,500	2,015,000		4,078,060	.37

Engineer's Class 4 Design Construction Cost Estimate
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California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE BENCH OPTION
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3 SITE CONSTRUCTION EMBANKMENT

SPEC.	DESCRIPTION	QUANTITY	UOM	LABOR	EQUIPMENT	MATERIAL	OTHER	TOTAL COST	UNIT PRICE
02315.0	Excavation and Fill: Haul Roads NOT USED		LF						
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA						
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA						
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	43,600,000.0	CY	14,388,000	23,108,000			37,496,000	.86
02315.0	Excavation: Exc., Load, Haul, Waste Bench	480,000.0	CY	499,200	1,104,000			1,603,200	3.34
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	12,100,000.0	CY	3,630,000	12,100,000			15,730,000	1.30
02330.0	Embankment: Moisture Condition Borrow	12,100,000.0	CY	2,541,000	3,146,000			5,687,000	.47
02330.0	Embankment: Load, Haul, Place, Compact Borrow	10,100,000.0	CY	6,060,000	15,655,000			21,715,000	2.15
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT USED		EA						
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NOT USED		EA						
02370.0	Erosion and Sed. Control: Filter Fabric Levee	8,600,000.0	SF	688,000	344,000	602,000		1,634,000	.19
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	10,820,000.0	SF	865,600	432,800	757,400		2,055,800	.19
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	65,000.0	CY	383,500	858,000	1,495,000		2,736,500	42.10
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	130,000.0	CY	767,000	1,716,000	3,380,000		5,863,000	45.10
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding	80,000.0	CY	280,000	888,000	1,840,000		3,008,000	37.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	200,000.0	CY	700,000	2,220,000	5,200,000		8,120,000	40.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap	284,000.0	CY	994,000	3,152,400	7,384,000		11,530,400	40.60
02700.0	Aggregate Surfacing: Unload, Haul, Place, Compact Road Base	28,000.0	CY	57,400	120,400	644,000		821,800	29.35
SITE CONSTRUCTION EMBANKMENT		10,887,000.0	CY	31,853,700	64,844,600	21,302,400		118,000,700	10.84

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California Department of Water Resources
San Joaquin River Delta Stockton, California

BACON ISLAND IN-DELTA STORAGE BENCH OPTION

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	QUANTITY	UOM	LABOR	EQUIPMENT	MATERIAL	OTHER	TOTAL COST	UNIT PRICE
TOTAL DIRECT COST	10,887,000.0	CY	37,258,260	67,881,100	23,362,400		128,501,760	11.80
GENERAL REQUIREMENTS								
SUBTOTAL							128,501,760	
GENERAL & ADMINISTRATIVE							6,425,088	
SUBTOTAL							134,926,848	
PROFIT							13,492,685	
SUBTOTAL							148,419,533	
BOND							1,484,195	
TOTAL DIRECT AND INDIRECT COST							149,903,728	13.77

Engineer's Class 4 Design Construction Cost Estimate
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BACON ISLAND IN-DELTA STORAGE BENCH OPTION
Effective Date: June, 2003

1 GENERAL REQUIREMENTS									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
01310.0	Management	60.0	MO	36,500.00	5,200.00			41,700.00	
				2,190,000	312,000			2,502,000	41,700.00
01320.0	Administration	60.0	MO	12,500.00	2,500.00			15,000.00	
				750,000	150,000			900,000	15,000.00
01430.0	Quality	60.0	MO	12,500.00	5,000.00			17,500.00	
				750,000	300,000			1,050,000	17,500.00
01520.0	Facilities	60.0	MO	1,500.00	5,500.00	500.00		7,500.00	
				90,000	330,000	30,000		450,000	7,500.00
01540.0	Mobilizaiton	50.0	EA	3,780.00	7,500.00			11,280.00	
				189,000	375,000			564,000	11,280.00
01720.0	Engineering	60.0	MO	15,200.00	500.00	250.00		15,950.00	
				912,000	30,000	15,000		957,000	15,950.00
GENERAL REQUIREMENTS		10,887,000.0	CY	4,881,000	1,497,000	45,000		6,423,000	.59

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2 SITE PREPARATION									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
02230.0	Site Clearing: Clearing and Grubbing	310.0	AC	326.00	1,150.00			1,476.00	
				101,060	356,500			457,560	1,476.00
02240.0	Dewatering: Oper. and Maint. Pump. & Drain. Sys. NOT USED		MO					.00	
02240.0	Dewatering: Construct Well Point System NOT USED		EA					.00	
	3500 GPM Per Set								
02240.0	Dewatering: Operate and Maintain Well Point System NOT USED		MO					.00	
02250.0	Shoring and Underpinning: Barge Unloading Facility	65,000.0	SF	6.50	18.20	31.00		55.70	
				422,500	1,183,000	2,015,000		3,620,500	55.70
	SITE PREPARATION	10,887,000.0	CY	523,560	1,539,500	2,015,000		4,078,060	.37

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
BACON ISLAND IN-DELTA STORAGE BENCH OPTION
Effective Date: June, 2003

3 SITE CONSTRUCTION EMBANKMENT									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
02315.0	Excavation and Fill: Haul Roads NOT USED		LF					.00	
02315.0	Excavation and Fill: Sediment Traps NOT USED		EA					.00	
02315.0	Excavation and Fill: Holding Ponds NOT USED		EA					.00	
02315.0	Excavation: Exc., Load, Haul, Waste Overburden	43,600,000.0	CY	.33	.53			.86	
				14,388,000	23,108,000			37,496,000	.86
02315.0	Excavation: Exc., Load, Haul, Waste Bench	480,000.0	CY	1.04	2.30			3.34	
				499,200	1,104,000			1,603,200	3.34
02315.0	Excavation: Exc., Load, Haul, Stockpile Borrow	12,100,000.0	CY	.30	1.00			1.30	
	Assume Yield 70%			3,630,000	12,100,000			15,730,000	1.30
02330.0	Embankment: Moisture Conditon Borrow	12,100,000.0	CY	.21	.26			.47	
				2,541,000	3,146,000			5,687,000	.47
02330.0	Embankment: Load, Haul, Place, Compact Borrow	10,100,000.0	CY	.60	1.55			2.15	
	4,000 LF Haul			6,060,000	15,655,000			21,715,000	2.15
02370.0	Erosion and Sed. Control: Geotex. Line Sed. Traps NOT USED		EA					.00	
02370.0	Erosion and Sed. Control: Geotex. Line Hold Ponds NOT USED		EA					.00	
02370.0	Erosion and Sed. Control: Filter Fabric Levee	8,600,000.0	SF	.08	.04	.07		.19	
				688,000	344,000	602,000		1,634,000	.19
02370.0	Erosion and Sed. Control: Filter Fabric Reservoir	10,820,000.0	SF	.08	.04	.07		.19	
				865,600	432,800	757,400		2,055,800	.19
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding Slough	65,000.0	CY	5.90	13.20	23.00		42.10	
				383,500	858,000	1,495,000		2,736,500	42.10
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap Slough	130,000.0	CY	5.90	13.20	26.00		45.10	
				767,000	1,716,000	3,380,000		5,863,000	45.10
02370.0	Erosion and Sed. Control : Unload, Haul, Place Riprap Bedding Reservoir	80,000.0	CY	3.50	11.10	23.00		37.60	
				280,000	888,000	1,840,000		3,008,000	37.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap Reservoir	200,000.0	CY	3.50	11.10	26.00		40.60	
				700,000	2,220,000	5,200,000		8,120,000	40.60
02370.0	Erosion and Sed. Control: Unload, Haul, Place Riprap Reservoir 10:1 Slope	284,000.0	CY	3.50	11.10	26.00		40.60	
				994,000	3,152,400	7,384,000		11,530,400	40.60
02700.0	Aggregate Surfacing: Unload, Haul, Place, Compact Road Base	28,000.0	CY	2.05	4.30	23.00		29.35	
				57,400	120,400	644,000		821,800	29.35
	SITE CONSTRUCTION EMBANKMENT	10,887,000.0	CY	31,853,700	64,844,600	21,302,400		118,000,700	10.84

URS Corporation
Engineer's Class 4 Design Construction Cost Estimate
WEBB/BACON TRACT IN-DELTA STORAGE SEEPAGE CONTROL SYSTEM

WEBB/BACON TRACT IN-DELTA STORAGE SEEPAGE CONTROL SYSTEM

Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

Prepared By: URS Corporation
Denver, Colorado

The Estimated Construction Cost is calculated with Microsoft Excel software and presented in the following categories and sheets. The categories are Detail, Direct Summary and Indirect Summary containing 1 sheet each. All data is entered on the sheets in the Detail Category. The Direct and Indirect Summary communicate with the Detail category sheets. Each feature is subtotaled on the respective sheet in the Direct and Indirect Summary. A total is presented on sheet 1 of the Direct and Indirect Summary. The Direct Summary summarizes all data entered on the Detail sheets and computes Unit Prices. The Indirect Summary adds General Requirements, General and Administrative, Profit and Bond costs to the Direct Summary and computes "marked up" Unit Prices.

Cost Summary

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California
WEBB/BACON TRACT IN-DELTA STORAGE SEEPAGE CONTROL SYSTEM

SITE CONSTRUCTION EMBANKMENT		
Interceptor Wells		9,141,296
Monitor Wells		548,827
Electrical and Control Systems		2,509,949
Subtotal:	\$	12,200,072

Engineer's Class 4 Design Construction Cost Estimate

Integrated Storage Investigations Programs

California Department of Water Resources

San Joaquin River Delta Stockton, California

WEBB/BACON TRACT IN-DELTA STORAGE SEEPAGE CONTROL SYSTEM

Effective Date: June, 2003

2 SITE CONSTRUCTION WELLS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>DIRECT</i>	<i>GEN REQ</i>	<i>G & A</i>	<i>PROFIT</i>	<i>BOND</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02500.0	Wells: Drill and Case Interceptor Wells	31,000.0	LF	7,123,800	712,380	391,809	822,799	90,508	9,141,296	294.88
02500.0	Wells: Drill and Case Monitor Wells	6,500.0	LF	427,700	42,770	23,524	49,399	5,434	548,827	84.43
02500.0	Wells: Well Electrical and Control Systems	480.0	EA	1,956,000	195,600	107,580	225,918	24,851	2,509,949	5,229.06
	SITE CONSTRUCTION WELLS	719.0	EA	9,507,500	950,750	522,913	1,098,116	120,793	12,200,072	16,968.11
	SITE CONSTRUCTION WELLS	719.0	EA							
TOTAL DIRECT AND INDIRECT COST		480	EA	9,507,500	950,750	522,913	1,098,116	120,793	12,200,072	25,416.82

Engineer's Class 4 Design Construction Cost Estimate

Integrated Storage Investigations Programs

California Department of Water Resources

San Joaquin River Delta Stockton, California

WEBB/BACON TRACT IN-DELTA STORAGE SEEPAGE CONTROL SYSTEM

Effective Date: June, 2003

2 SITE CONSTRUCTION WELLS

<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
02500.0	Wells: Drill and Case Interceptor Wells	31,000.0	LF	471,200	917,600	5,735,000		7,123,800	229.80
02500.0	Wells: Drill and Case Monitor Wells	6,500.0	LF	98,800	192,400	136,500		427,700	65.80
02500.0	Wells: Well Electrical and Control Systems	480.0	EA	552,000	60,000	1,344,000		1,956,000	4,075.00
		<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT PRICE</i>
TOTAL DIRECT COST		480.0	EA	1,122,000	1,170,000	7,215,500		9,507,500	19,807.29
GENERAL REQUIREMENTS								950,750	
SUBTOTAL								10,458,250	
GENERAL & ADMINISTRATIVE								522,913	
SUBTOTAL								10,981,163	
PROFIT								1,098,116	
SUBTOTAL								12,079,279	
BOND								120,793	
TOTAL DIRECT AND INDIRECT COST								12,200,072	25,416.82

Engineer's Class 4 Design Construction Cost Estimate
Integrated Storage Investigations Programs
California Department of Water Resources
San Joaquin River Delta Stockton, California

WEBB/BACON TRACT IN-DELTA STORAGE SEEPAGE CONTROL SYSTEM

Effective Date: June, 2003

2 SITE CONSTRUCTION WELLS									
<i>SPEC.</i>	<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UOM</i>	<i>LABOR</i>	<i>EQUIPMENT</i>	<i>MATERIAL</i>	<i>OTHER</i>	<i>TOTAL COST</i>	<i>UNIT COST</i>
02500.0	Wells: Drill and Case Interceptor Wells	31,000.0	LF	15.20	29.60	185.00		229.80	
				471,200	917,600	5,735,000		7,123,800	229.80
02500.0	Wells: Drill and Case Monitor Wells	6,500.0	LF	15.20	29.60	21.00		65.80	
				98,800	192,400	136,500		427,700	65.80
02500.0	Wells: Well Electrical and Control Systems	480.0	EA	1,150.00	125.00	2,800.00		4,075.00	
				552,000	60,000	1,344,000		1,956,000	4,075.00